

Sequence Comparison

A41551
vascular endothelial growth factor 206 precursor - human
N;Alternate names: vascular permeability factor
N;Contains: vascular endothelial growth factor 121 (VEGF 121); VEGF 165; VEGF 189; VEGF 206
C;Species: Homo sapiens (man)
C;Date: 28-Aug-1992 #sequence_revision 28-Aug-1992 #text_change 05-Nov-1999
C;Accession: A41551; C41551; B41551; A40454; B40454; C40454; A40079; A40080; JQ1463; JQ1464; A34492; S17348
R;Houck, K.A.; Ferrara, N.; Winer, J.; Cachianes, G.; Li, B.; Leung, D.W.
Mol. Endocrinol. 5, 1806-1814, 1991
A;Title: The vascular endothelial growth factor family: identification of a fourth molecular species and characterization of alternative splicing of RNA.
A;Reference number: A41551; MUID:92168017; PMID:1791831
A;Accession: A41551
A;Molecule type: mRNA
A;Residues: 1-232 <HOU1>
A;Cross-references: GB:S85192; NID:g246155; PID:g246156
A;Accession: C41551
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-140,'N',183-232 <HOU2>
A;Accession: B41551
A;Status: nucleic acid sequence not shown; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-141,227-232 <HOU>
R;Tischer, E.; Mitchell, R.; Hartman, T.; Silva, M.; Gospodarowicz, D.; Fiddes, J.C.; Abraham, J.A.
J. Biol. Chem. 266, 11947-11954, 1991
A;Title: The human gene for vascular endothelial growth factor. Multiple protein forms are encoded through alternative exon splicing.
A;Reference number: A40454; MUID:91268072; PMID:1711045
A;Accession: A40454
A;Molecule type: DNA
A;Residues: 1-165,183-232 <TI1>
A;Cross-references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63976; GB:M63977; GB:M63978; NID:g340213; PIDN:AAA36804.1; PID:g340215
A;Accession: B40454
A;Molecule type: DNA
A;Residues: 1-140,'N',183-232 <TI2>
A;Cross-references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63977; GB:M63978
A;Accession: C40454
A;Molecule type: DNA
A;Residues: 1-141,227-232 <TI3>
A;Cross-references: GB:M63971; GB:M63972; GB:M63973; GB:M63974; GB:M63975; GB:M63978
R;Keck, P.J.; Hauser, S.D.; Krivi, G.; Sanzo, K.; Warren, T.; Feder, J.; Connolly, D.T.
Science 246, 1309-1312, 1989
A;Title: Vascular permeability factor, an endothelial cell mitogen related to PDGF.
A;Reference number: A40079; MUID:90069609; PMID:2479987
A;Accession: A40079
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-165,183-232 <KEC>
A;Cross-references: GB:M27281; NID:g340300; PIDN:AAA36807.1; PID:g340301
R;Leung, D.W.; Cachianes, G.; Kuang, W.J.; Goeddel, D.V.; Ferrara, N.
Science 246, 1306-1309, 1989
A;Title: Vascular endothelial growth factor is a secreted angiogenic mitogen.
A;Reference number: A40080; MUID:90069608; PMID:2479986
A;Accession: A40080
A;Status: not compared with conceptual translation
A;Molecule type: mRNA

A;Residues: 1-140, 'N',183-232 <LEU>
 A;Cross-references: GB:M32977; NID:g181970; PIDN:AAA35789.1; PID:g181971
 R;Weindel, K.; Marme, D.; Weich, H.A.
 Biochem. Biophys. Res. Commun. 183, 1167-1174, 1992
 A;Title: AIDS-associated Kaposi's sarcoma cells in culture express vascular endothelial growth factor.
 A;Reference number: JQ1463; MUID:92231879; PMID:1567395
 A;Accession: JQ1463
 A;Molecule type: mRNA
 A;Residues: 1-140, 'N',183-232 <WEI>
 A;Cross-references: EMBL:X62568; NID:g37658; PIDN:CAA44447.1; PID:g37659
 A;Experimental source: AIDS-Kaposi's sarcoma cell
 A;Accession: JQ1464
 A;Molecule type: mRNA
 A;Residues: 1-140, 'N',227-232 <WE2>
 A;Experimental source: AIDS-Kaposi's sarcoma cell
 R;Connolly, D.T.; Olander, J.V.; Heuvelman, D.; Nelson, R.; Monsell, R.; Siegel, N.;
 Haymore, B.L.; Leimgruber, R.; Feder, J.
 J. Biol. Chem. 264, 20017-20024, 1989
 A;Title: Human vascular permeability factor. Isolation from U937 cells.
 A;Reference number: A34492; MUID:90062112; PMID:2584205
 A;Accession: A34492
 A;Molecule type: protein
 A;Residues: 27-36;43-49,'R';72-76,'Q',78-81;59-71 <CON>
 C;Comment: The most common of several alternatively spliced forms is VEGF 165.
 C;Genetics:
 A;Gene: GDB:VEGF
 A;Cross-references: GDB:132244; OMIM:192240
 A;Map position: 6p21-6p12
 C;Function:
 A;Description: promotes fluid and protein leakage from blood vessels

Query Match 10.2%; Score 238.5; DB 2; Length 232;
 Best Local Similarity 24.7%; Pred. No. 2.2e-10;
 Matches 70; Conservative 33; Mismatches 101; Indels 79; Gaps 10;

 Qy 69 LMTVLYPEYWKMYKCQLRKGGWQHNREQANLNSRTEETIKFAAAHYNTEILKSIDNEWRK 128
 Db 14 LLLYLHHAKWSQAAPMAEGGGQNHH-----EVVKFM-----DVYQR 49

 Qy 129 TQCMPREVCIDVGKEFGVATNTFFKPPCVSVYRCGGCCNSEGLQCMNTSTSylSKTLFEI 188
 Db 50 SYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGCCNDEGLECPTEESNITMQIMRI 109

 Qy 189 TVPLSQGPKPVTISFANHTSCRCMSKLDVYRQVHSIIRRSLPATLPQCQAANKTCPTNYM 248
 Db 110 KP--HQGQHIGEMSFLQHNKCECRPKKDRARQEKKSVRGK-----GKGQKRKRKKSRK 162

 Qy 249 WNNHI-CRCLAQEDFMFSSDAGDDSTDGFHDICGPNEELDEETCQCVCRAGL-RPASCGP 306
 Db 163 WSVYVGARC-----CLMPWSLPGPHPCGP 186

 Qy 307 HKE-----LDRNSCQCVCKNKLFPSQCGANR-EFDENTCQC 341
 Db 187 CSERRKHLFVQDPQTCKCSCKNT--DSRCKARQLELNERTCRC 227